Nicholas Caro Lopez

Burlington, ON | Website | LinkedIn | Github

Education

Toronto Metropolitan University (formerly Ryerson University)

Sept. 2022 - Present

Candidate for Bachelor of Science (Honours), Computer Science Co-op

CGPA: 4.09/4.33

- Relevant Coursework: Data Structures & Algorithms, Web Development, Intro to Unix & C, Linear Algebra
- Extracurricular Involvement: Senior Representative for Metropolitan Open Source Society
- Awards: Faculty of Science Dean's List 2022-23, Academic Entrance Scholarship

Technical Skills

- Computer Languages: Python, Java, C, HTML, CSS, JavaScript, Lisp, Perl, PHP, Ruby, Bash
- Frameworks/Libraries: MySQL, Tailwind CSS, Bootstrap, JQuery, Qt
- Development Tools: Visual Studio Code, Git/Github, Unix/Linux
- Spoken Languages: English, Spanish

Work Experience

Software Developer, Toronto Metropolitan University - Toronto, ON

Sept. 2023 - Present

- Integrated an advanced image-based motion tracking extension into open-source software, 3D Slicer
- Cooperated effectively within a **Agile software development team**, optimizing workflow, visualizing progress, and delivering quality software solutions on time
- Created new functionality on the graphical user interface, increasing usability by 25%, using the **3D Slicer Python API**

Teaching Assistant, RoboThink Northwest Toronto - Burlington, ON

May 2023 - Aug. 2023

- Designed and taught a comprehensive curriculum introducing students to programming in Scratch
- Assisted the STEM Teacher in utilizing RoboThink materials effectively to deliver engaging and interactive lessons
- \bullet Enhanced students learning through administrative tasks such as organizing curriculum binders and printouts, improving productivity by 50%
- Demonstrated attentiveness to individual students, providing personalized support and guidance to enhance their learning experience

Associate, Dollarama - Burlington, ON

May 2022 - Aug. 2022

- Provided courteous customer service by warmly welcoming customers and addressing their inquiries or issues promptly
- Conducted financial transactions including credit/debit cards, cash, gift cards, and store credits with proficiency
- Collaborated with floor staff to maintain a well-stocked and organized store by assisting with restocking shelves and ensuring clean aisles

Personal Projects

Sudoku Solver - HTML, CSS, JavaScript

May 2023 - Aug. 2023

- Defined an **Event Listener** and **Regex** for capturing and restricting user input to digits 1-9
- Created a responsive and interactive web page using CSS concepts, namely Media Queries and Flexbox/Grid Layout
- Employed the **Backtracking Algorithm** to solve every valid Sudoku board inputted by the user and displayed the solution dynamically on the web page

Simon-Says Memory Game - Java

Feb. 2023 - Apr. 2023

- \bullet Utilized the $\bf JFrame$ library to generate and display the graphical user interface
- Incorporated **Object-Oriented Programming** concepts such as **Classes**, **Objects** and **Inheritance** to create and display items such as the game level and buttons
- Applied Inheritance and Method Overriding enabling the program to receive the user's mouse clicks and execute certain functions accordingly

Riemann Sum Calculator - Python

Oct. 2022 - Dec. 2022

- Wrote a script with the purpose of approximating the area under a polynomial curve
- Implemented Variables, Data Types, Control Flow, Modules and User Input to read a given mathematical function
- Executed Functions, Exception Handling and File I/O to calculate the integral and return the area in a .txt file